<u>Glossary</u>

1. **Business cycle** The term business cycle refers to economy-wide fluctuations in production or economic activity over several months or years. These fluctuations occur around a long-term growth trend, and typically involve shifts over time between periods of relatively rapid economic growth and periods of relative stagnation or decline.

2. Chain index

An index number in which the value at any given period is related to a base in the previous period, as distinct from one which is related to a fixed base.

3. Cyclical variations

Cyclical variations are recurrent variations in a time series usually last longer than a year.

4. Index number

Index number is a quantity which shows by its variations the changes of a magnitude over time or space.

5. Least square

The method of least squares is a standard approach to the approximate solution of over determined systems, i.e., sets of equations in which there are more equations than unknowns. Least square means that the overall solution minimizes the sum of the squares of the errors made in the results of every single equation.

6. Link relative method

This is a method for computing indexes by dividing the value of a magnitude in one period by the value in the previous period

7. Mean

Mean usually refers to the expectation of a variate, or to the arithmetic mean of a sample used as an estimate of the expectation.

8. Median

The median is that value of the variate which divides the total frequency into two halves.

9. Moving average

A moving average is commonly used with time series data to smooth out short-term fluctuations and highlight longer-term trends or cycles

10. Ratio to moving average

This is also known as the percentage of moving averages and is the most widely method of measuring seasonal variations.

11. Ratio to Trend method

This is a method of calculating a seasonal index assuming that seasonal variations for a given month are a constant fraction of trend

12. Seasonal index

Seasonal variation is measured in terms of an index, called a seasonal index. It is an average that can be used to compare an actual observation relative to what it would be if there were no seasonal variations.

13. Seasonal variation

In time series, that part of the movement which is assigned to the effect of the seasons on the year, e.g. seasonal variation in rainfall. Sometimes the term is used in a wider sense relating to oscillations generated by periodic external influences, e.g. daily variations in temperature might be regarded as "seasonal".

14. Time series

A time series is a set of regular time-ordered observations of a quantitative characteristic of an individual or collective phenomenon taken at successive, in most cases equidistant, periods or points of time

15. Trend line

A trend line is formed when we can draw a diagonal line between two or more price pivot points.